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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,540	02/10/2004	Shinsuke Okada	P24587	1084

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EXAMINER
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KASZTEJNA, MATTHEW JOHN

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/774,540

Applicant(s)

OKADA ET AL.

Examiner

Matthew J Kasztejna

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication No. 2004/0122290 to Irion et al.

**In regards to claim 1**, Irion et al. disclose an endoscope 12 comprising: an inserting tube 14 to be inserted into a human body; a first optical system 106 secured in a tip end of the inserting tube for observing in vivo tissues within a human body at first magnification; and a second optical system 108 secured in the tip end of the inserting tube for observing the in vivo tissues at second magnification that is higher than the first magnification (see paragraph 0070)).

**In regards to claims 2 and 20**, Irion et al. disclose an endoscope wherein a portion of the second optical system is within the field of view 134 of the first optical system (see Fig. 4).

**In regards to claim 3**, Irion et al. disclose an endoscope comprising a tip body 30b mounted on a distal end of the inserting tube, the tip body holding the first optical system and the second optical systems (see paragraph 0034).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,989,185 to Miyazaki.

**In regards to claim 1**, Miyazaki disclose an endoscope 2 comprising: an inserting tube 24 to be inserted into a human body; a first optical system 36 secured in a tip end of the inserting tube for observing in vivo tissues within a human body at first magnification; and a second optical system 37 secured in the tip end of the inserting tube for observing the in vivo tissues at second magnification that is higher than the first magnification (see Col. 4, Lines 30-45).

**In regards to claims 2 and 20**, Miyazaki disclose an endoscope wherein a portion of the second optical system is within the field of view 134 of the first optical system (see Col. 5, Lines 1-10).

**In regards to claim 3**, Miyazaki disclose an endoscope comprising a tip body 30b mounted on a distal end of the inserting tube, the tip body holding the first optical system and the second optical systems (see Fig. 4).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4-12, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,989,185 to Miyazaki in view of U.S. Patent No. 5,193,525 to Silverstein et al.

**In regards to claims 4, 8-9, 12, 14 and 19**, Miyazaki disclose an endoscope comprising: an inserting tube to be inserted into a human body; a first optical system secured in a tip end of the inserting tube for observing in vivo tissues within a human body at first magnification; and a second optical system secured in the tip end of the inserting tube for observing the in vivo tissues at second magnification that is higher than the first magnification but is silent with respect to wherein the first optical system and the second optical system are provided on an end surface of the tip body, the second optical system being arranged such that at least a front end portion thereof is protruded with respect to the first optical system. Silverstein et al. teach of an analogous endoscope having a tip 70 that includes an opaque recess 108 positioned to mate with projection 110 surrounding the image viewer 54 and extending from the top

Art Unit: 3739

surface of the endoscope 50 (see Col. 9 Lines 37-68 and Fig. 11). It would have been obvious to one skilled in the art at the time of the invention was made to arrange the second optical system in the apparatus of Miyazaki to be protruded with respect to the first optical system in order to trap all light, such that no light is able to successfully reflect internally within the lens material within the endoscope as taught by Silverstein et al.

**In regards to claim 5**, Miyazaki disclose an endoscope wherein the first optical system is arranged such that a front-end portion thereof is substantially flush with respect to the end surface of the tip body (see Fig. 4).

**In regards to claim 6**, Miyazaki disclose an endoscope wherein an optical axis of the first optical system and an optical axis of the second optical system are substantially parallel with each other (see Fig. 4).

**In regards to claim 7**, Miyazaki disclose an endoscope wherein the second optical system is arranged not to interfere with a central area of the field of view of the first optical system (see Fig. 8).

**In regards to claim 10**, Miyazaki disclose an endoscope wherein the tip body is arranged such that the at least a part of the cover member does not interfere with a central area of the field of view of the first optical system (see Fig. 4).

**In regards to claim 11**, Miyazaki disclose an endoscope wherein the tip body is arranged such that the cover member of the tip body does not intersect a horizontal centerline and a vertical centerline of the field of view of the first optical system (see Fig. 4).

Art Unit: 3739

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,989,185 to Miyazaki in view of U.S. Patent No. 5,193,525 to Silverstein et al in further view of U.S. Patent No. 4,790,295 to Tashiro.

**In regards to claim 13**, Miyazaki and Silverstein et al. disclose an endoscope comprising: an inserting tube to be inserted into a human body; with a first optical system and second optical system being contained within a tip body but is silent with respect to the tip body being made of hard resin. Tashiro teaches of an analogous endoscope having a transparent resin-sealing layer of a uniform thickness and seals the inside of the sheath at one end (see Col. 2, Lines 39-45). It would have been obvious to one skilled in the art at the time the invention was made to construct the tip portion in the apparatus of Miyazaki and Silverstein et al. from a hard resin in order to completely seal the sheath from bodily fluids with a material having a stable strength as taught by Tashiro.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,989,185 to Miyazaki in view of U.S. Patent No. 5,193,525 to Silverstein et al in further view of U.S. Patent No. 4,593,682 to Hecke.

**In regards to claim 15**, Miyazaki and Silverstein et al. disclose an endoscope 12 comprising: an inserting tube 14 to be inserted into a human body; with a first optical system and second optical system being contained within a tip body but is silent with respect to the tip body being made of hard resin but is silent with respect to wherein the tip body is formed with an outlet of a forceps channel for introducing a forceps into the human body, and wherein the cover member of the tip body is formed not to interfere

Art Unit: 3739

with the forceps protruded from the outlet. Heckeles teach of an analogous endoscope for the observation and examination of bodily cavities which provides access through the endoscope of additional instruments (see Col. 2, Lines 20-33). It would have been obvious to one skilled in the art at the time the invention was made to include an instrument access channel in the apparatus of Miyazaki and Silverstein et al. so as to allow for possible treatment of the tissue being observed with an auxiliary instrument as taught by Heckeles.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,989,185 to Miyazaki in view of U.S. Patent No. 5,193,525 to Silverstein et al in further view of U.S. Patent No. 6,530,882 to Farkas et al.

**In regards to claim 16**, Miyazaki and Silverstein et al. disclose an endoscope 12 comprising: an inserting tube 14 to be inserted into a human body; with a first optical system and second optical system being contained within a tip body but is silent with respect to wherein the second optical system is a confocal optical system. Farkas et al. teach of an analogous endoscope assembly wherein a line scanning confocal assembly is contained within the housing (see Col. 2, Lines 25-38). It would have been obvious to one skilled in the art at the time the invention was made to have a confocal optical system in the apparatus of Miyazaki and Silverstein et al. in order to enable microscopic examination of the tissue at varying levels into the tissue as taught by Farkas et al.

**In regards to claim 17**, Miyazaki disclose an endoscope further comprising: an imaging device 41 provided in the tip end of the flexible inserting tube, and wherein the

Art Unit: 3739

first optical system forms an image of a target on the imaging device (see Col. 4, Lines 30-34).

**In regards to claim 18**, Miyazaki disclose an endoscope further comprising an optical fiber 45 that transmits light returned from the in vivo tissues only the light from a level of a focal plane of the second optical system being transmitted through the optical fiber (see Fig. 4).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 4,279,247 to Kinoshita

U.S. Patent No. 5,846,185 to Carollo et al.

U.S. Patent No. 3,889,662 to Mitsui

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Kasztejna whose telephone number is (571) 272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

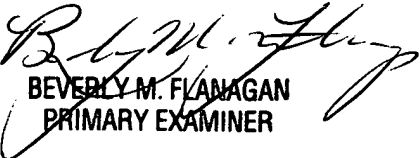
Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

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BEVERLY M. FLANAGAN  
PRIMARY EXAMINER